

Amendment and Response

Applicant: Robert L. Battey et al.

Serial No.: 09/812,158

Filed: March 19, 2001

Docket No.: 10961158-6

Title: ELECTRICAL AND FLUIDIC INTERFACE FOR AN INK SUPPLY

REMARKS

This Amendment is responsive to the Office Action mailed June 29, 2001 in which claim 1 was rejected. With this Response, claim 1 has been canceled and claims 16-30 have been added. Claims 16-30 remain pending in the application and are presented for reconsideration and allowance.

Disclosure Objections

The disclosure was objected to because continuation data with respect to U.S. Application Serial Nos. 08/363,188 and 08/584,499 was not disclosed. In addition, U.S. Patent Application Serial Numbers were said to be missing from page 1 of the specification. In response, Applicants have added the data requested by the Examiner. As such, the objections to the specification are believed to have been overcome and should be withdrawn. Such action is respectfully requested.

Claim Rejections based upon Double Patenting

Claim 1 was rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 13 and 15-17 of prior U.S. Patent 6,203,147 to Battey et al. In response claim 1 has been canceled obviating this rejection. As such, this rejection should be withdrawn. Such action is respectfully requested.

Added Claims

Claims 16-30 have been added. Applicants do not believe that these claims claim the same invention as that of the claims of the Battey et al. patent. As such, these claims are believed to be in condition for allowance. A notice to that effect is respectfully requested.

CONCLUSION

In light of the above, Applicants believe that all claims 16-30 remaining in the application are in condition for allowance. Allowance of these claims is respectfully requested.

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Attached hereto is a marked-up version of the changes made to the specification and/or the claims by the current Amendment. The attached pages are captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**".

Any inquiry regarding this Amendment and Response should be directed to Kevin B. Sullivan at Telephone No. (858) 655-5228, Facsimile No. (858) 655-5859. In addition, all correspondence should continue to be directed to the following address:

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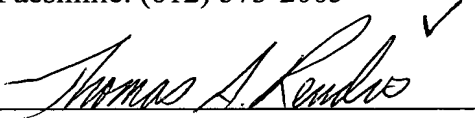
Respectfully submitted,

Robert L. Battey et al.,

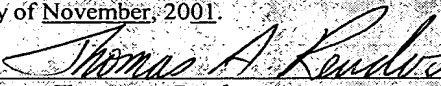
By their attorneys,

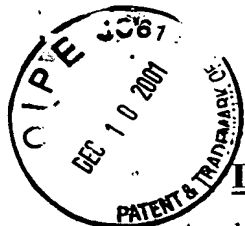
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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, Washington, D.C., 20231 on this 29th day of November, 2001.

By 
Name: Thomas A. Rendos



**VERSION WITH MARKINGS
TO SHOW CHANGES MADE**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert L. Battey et al.

Examiner: Michael Nghiem

Serial No.: 09/812,158

Group Art Unit: 2861

Filed: March 19, 2001

Docket No.: 10961158-6

Title: ELECTRICAL AND FLUIDIC INTERFACE FOR AN INK SUPPLY

AMENDMENT AND RESPONSE

Commissioner for Patents
Washington, D.C. 20231

Dear Sir/Madam:

This Amendment is responsive to the Office Action mailed June 29, 2001. Please amend the above-identified patent application as follows:

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 11, with the following rewritten paragraph:

This application is a continuation-in-part of U.S. Patent Application 08/584,499 filed January 8, 1996, entitled "Replaceable Part With Integral Memory For Usage, Calibration And Other Data", now U.S. Patent No. 5,699,091, which is a continuation-in-part of U.S. Patent Application 08/363,188 filed December 22, 1994, entitled "Replaceable Part With Integral Memory For Usage And Calibration Data", now U.S. Patent No. 5,491,540; and this application is related to commonly assigned applications filed herewith entitled "*Ink Container Configured For Use With Printer*", serial number 08/789,959, Attorney Docket number 10961157, filed January 30, 1997, and Patent Application entitled "*Electrical Interconnect For Replaceable Ink Containers*", serial number 08/789,958, Attorney Docket number 10961160, filed January 30, 1997, and Patent Application entitled "*Ink Container Configured For Use With Compact Supply Station*", serial number 08/789,957, Attorney Docket number 10961159, filed January 30, 1997, the entire contents of which are incorporated by reference herein.

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IN THE CLAIMS

Please cancel claim 1.

Please add claims 16-30 as follows:

--16) A replaceable ink container for use in an off axis printing system, the printing system being responsive to electrical signals produced by the replaceable ink container for controlling printing system parameters, the replaceable ink container having a leading edge defined as that edge of the replaceable ink container first received by the printing system, the replaceable ink container comprising:

a plurality of electrical contacts on the leading edge at a first side of the leading edge, the plurality of electrical contacts configured for engaging a plurality of corresponding electrical printer contacts of the printing system;

a fluid outlet on the leading edge at a second side of the leading edge that is directly opposite to the first side such that the fluid outlet is separated from the plurality of electrical contacts, the fluid outlet being in fluid communication with the replaceable ink container and configured for engaging a fluid inlet of the printing system; and

an information storage device electrically connected to the plurality of electrical contacts.

17) The replaceable ink container of claim 16 wherein the leading edge defines a longitudinal axis with the first side and the second side being disposed on the longitudinal axis.

18) The replaceable ink container of claim 16 further including a latch feature, the replaceable ink container having an unlatched position and a latched position, wherein the latch feature is in engagement with corresponding engagement features of the printing system, the plurality of electrical contacts of the replaceable ink container are in engagement with the plurality of corresponding electrical printer contacts, and the fluid outlet is in fluid communication with the fluid inlet of the printing system.

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19) The replaceable ink container of claim 18 wherein the latch feature is a pair of latch features, and wherein one latch feature of the pair of latch features is on the replaceable ink container adjacent to the first side and another latch feature of the pair of latch features is on the replaceable ink container adjacent to the second side.

20) A replaceable ink container for use with a printing portion of an off axis printing system, the replaceable ink container having a docked position, wherein the replaceable ink container is mounted to the printing portion so as to provide ink to the printing portion, and to provide the printing portion with electrical signals for controlling printing system parameters, the replaceable ink container comprising:

a fluid outlet portion for providing fluid to the printing portion, wherein the fluid outlet portion is mounted rigidly to the ink container and is configured for engaging corresponding guiding features of the printing portion that align the fluid outlet portion with corresponding fluid inlet portions of the printing portion; and

an electrical interface portion having a plurality of electrical contacts for transferring the electrical signals between the replaceable ink container and the printing portion, the electrical interface portion including an engagement portion separated from and positioned opposite to the plurality of electrical contacts, wherein the electrical interface portion in the docked position engages guiding features of the printing portion to position electrical contact portions of the printing portion between the engagement portion and the plurality of electrical contacts to electrically engage the replaceable ink container with the printing portion without applying a force to the replaceable ink container that would affect engagement of the fluid outlet portion with the corresponding fluid inlet portions of the printing portion.

21) The replaceable ink container of claim 20 wherein the electrical interface portion is a cavity within an outer surface of the replaceable ink container, the cavity having a first inner surface defining the engagement portion and a second inner surface having the plurality of electrical contacts thereon.

22) The replaceable ink container of claim 21 wherein the fluid outlet portion is disposed on the outer surface of the replaceable ink container.

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23) The replaceable ink container of claim 22 wherein the outer surface of the replaceable ink container is a leading edge defined as that edge of the replaceable ink container first received by the printing portion.

24) The replaceable ink container of claim 23 wherein the leading edge has a longitudinal axis and a lateral axis perpendicular to the longitudinal axis, and wherein the longitudinal axis bisects the fluid outlet portion and the cavity defining the electrical interface portion.

25) The replaceable ink container of claim 24 wherein the fluid outlet portion is at a first end of the longitudinal axis and the cavity defining the electrical interface portion is at a second end of the longitudinal axis opposite the first end.

26) A replaceable ink container for use in an off axis printing system, the printing system being responsive to electrical signals produced by the replaceable ink container for controlling printing system parameters, the replaceable ink container comprising:

a leading edge defined as that edge of the replaceable ink container first received by the printing system, the leading edge having a longitudinal axis and a lateral axis perpendicular to the longitudinal axis;

an electrical interface portion having a plurality of electrical contacts for transferring the electrical signals between the replaceable ink container and the printing system, wherein the electrical interface portion is a cavity within the leading edge of the replaceable ink container, the cavity being bisected by the longitudinal axis and having an inner surface with the plurality of electrical contacts thereon such that the plurality of electrical contacts are configured for engaging a plurality of corresponding electrical printer contacts of the printing system; and

a fluid outlet on the leading edge such that the longitudinal axis bisects the fluid outlet, wherein the fluid outlet is separated from the cavity defining the electrical interface portion, with the fluid outlet being in fluid communication with the replaceable ink container and configured for engaging a fluid inlet of the printing system.

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- 27) The replaceable ink container of claim 26, and further including:
an information storage device electrically connected to the plurality of electrical contacts.
- 28) The replaceable ink container of claim 26 wherein the fluid outlet is configured to receive fluid inlet of the printing system along a fluid interconnect axis, and wherein interengagement of the electrical interface portion with the corresponding electrical printer contacts of the printing system is free from any forces acting on the replaceable ink container in a direction perpendicular to the fluid interconnect axis.
- 29) The replaceable ink container of claim 26 wherein the electrical interface portion is fixed to the replaceable ink container and the corresponding electrical printer contacts of the printing system float on the printing system.
- 30) The replaceable ink container of claim 26, and further including:
a latch feature, wherein the replaceable ink container has an unlatched position and a latched position, in the latched position the latch feature is in engagement with corresponding engagement features of the printing system, wherein the plurality of electrical contacts of the electrical interface portion engage the corresponding electrical printer contacts of the printing system, and wherein the fluid outlet is in fluid communication with the fluid inlet of the printing system.